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To: ["Direct to Mayor and Council - DL"](#)

Date: 3/31/2022 2:12:37 PM

Subject: [Supporting Materials for the March 31/April 7 Capital Planning Workshop - Public](#)

Attachments: [2023-2026 Council Capital Plan Workshop - Main.pdf](#)

[2023-2026 Council Capital Plan Workshop - Service Category Presentations.pdf](#)

Dear Mayor and Council,

Attached are the presentation slides that will be used to frame Council's discussion in the March 31/April 7, 2022 Council Capital Planning Workshop.

These documents are public and will be posted publicly along with the Special Meeting Council Agenda.

All the best,

Karen

Karen Levitt, Deputy City Manager (she/her)
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The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xʷməθkʷəy̓əm/Musqueam, Skwxwú7mesh/Squamish and səliłwətaʔ/Tsleil-Waututh nations

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Vancouver City Council Capital Planning Workshops

March 30, 2022 and April 7, 2022

The purpose of these two Council capital planning workshops is to provide Council the opportunity to have an in-depth collective conversation about the development of the 2023-2026 Draft Capital Plan.

March 31, 2022

1. Introduction, City Manager [20 mins]
2. The Capital Plan and city-building, GM, PDS [10 mins]
3. 2023-2026 Draft Capital Plan overview, GM, FRS [30 mins]
4. Questions to staff [60 mins]
5. Capital Plan service category presentations, GMs [60 mins]

April 7, 2022

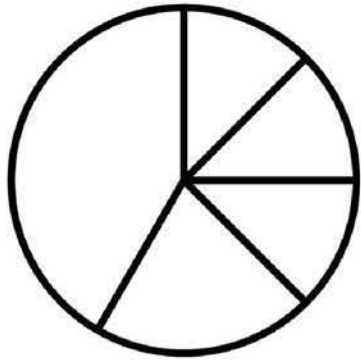
6. Capital Plan service category presentations, GMs, cont'd [40 mins]
7. Large one-off projects [60 mins]
8. Council discussion and questions to staff [80 mins]

1.

Introduction, City Manager

[20 minutes]

Developing the 2023-2026 Draft Capital Plan



- An exercise in allocating scarce resources, means of building our city and delivering services
- Developed by staff, balancing many complex variables ...
 - Existing capital programs
 - In-progress projects started in previous Capital Plans
 - Existing Council direction via community plans, long-term strategic plans, and Council resolutions
 - Recent Council motions (climate, community facilities and aging infrastructure, housing)
 - Available third-party funding
 - Funding source restrictions

Opportunities for Council to provide direction re: the 2023-2026 Capital Plan

*Optimal time for Council to
make any desired changes
to the Capital Plan*

BY MARCH 23	MARCH 31 & APRIL 7	APRIL 26	APRIL 30 - MAY 22	LATE JUNE	JULY 6	OCTOBER
1. Develop Draft Capital Plan	2. Council workshops	3. Council report, approval Draft Capital Plan and initiate public engagement	4. Public engagement	5. Council briefing, report out on public engagement findings and recommended adjustments	6. Finalise Capital Plan/Council approval	7. Plebiscite questions

Purpose of these workshops



- Provide Council ...
 1. In-depth information re: what is included in the 2023-2026 Draft Capital Plan
 2. The opportunity to ask staff questions about proposed allocations
 3. More insight into the difficult tradeoffs involved in developing the Plan
 4. Opportunity to direct staff to seek public input on specific tradeoffs
- Also an opportunity to consider giving staff further direction on Plan development – noting two more opportunities in late April and early July 2022

Twelve Capital Plan service categories

1. Parks and public open spaces

2. Community facilities

- a. Recreational facilities
- b. Libraries
- c. Social facilities
- d. Archive

3. Civic facilities and equipment

- a. Service yards
- b. Vehicles/equipment

4. Streets

5. One water

- a. Potable water
- b. Rainwater
- c. Sanitary water

6. Solid waste

7. Renewable energy

8. Technology

9. Affordable housing

10. Childcare

11. Arts and culture

- a. Public art and cultural facilities
- b. Heritage buildings

12. Public safety

- a. Fire services
- b. Police services
- c. Animal Services

Discretion in developing the 2023-2026 Capital Plan



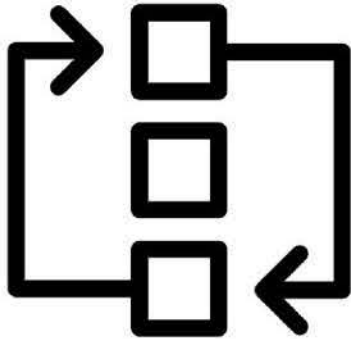
There are minimum thresholds in each Service Category that staff would recommend.

There is an upper limit to how large the Capital Plan can be



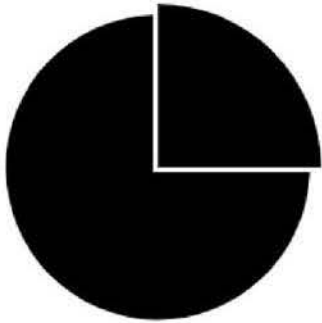
- The size of the Capital Plan has a direct impact on the City's operating budget
- Since 2019, increased operating budget funding allocation to help address the infrastructure deficit – represents 1% property tax increase in each year, directed toward additional tax-supported capital renewal projects/programs
- Development contributions cannot increase without limit, at some point impact the economic viability of a development project
- Senior government funding has limited financial capacity

Difficult tradeoffs are part of developing each Capital Plan



- Developing the City's capital plans always involves tradeoffs
- At this workshop, staff will be presenting the preliminary draft of the 2023-2026 Capital Plan, as well as key elements that are currently unfunded

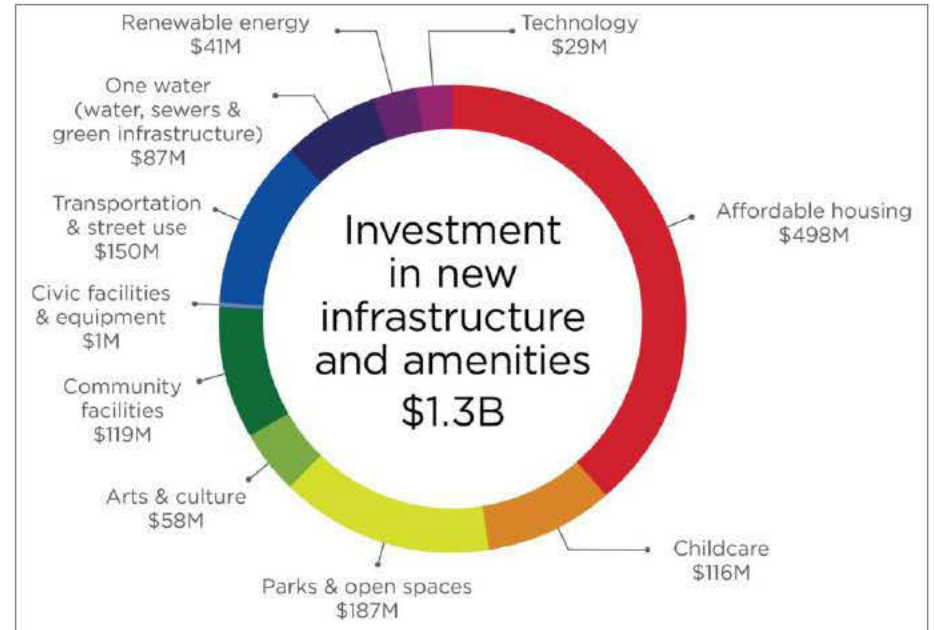
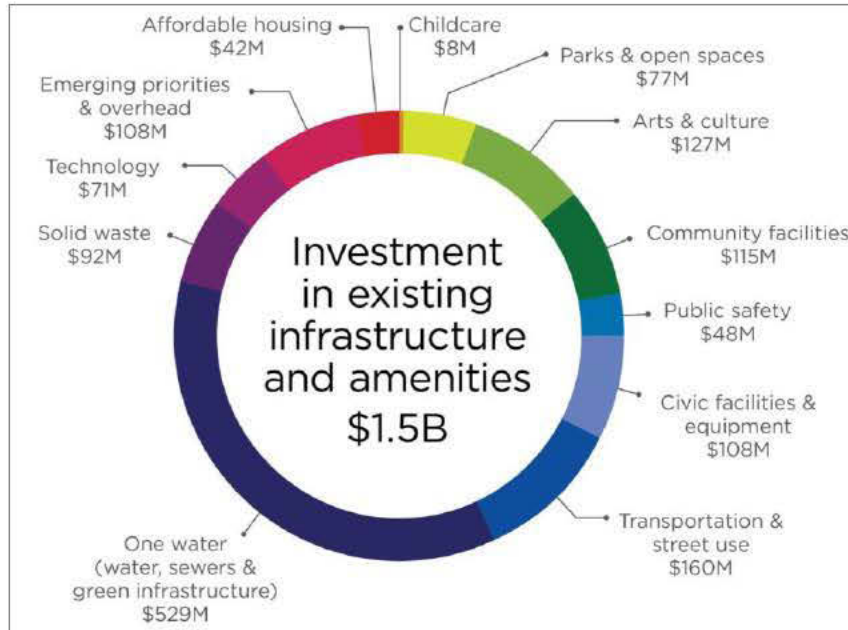
Development Cost Levy Update coming to Council in Q2-2022



- Upcoming Development Cost Levy Update will establish DCL allocations over the next decade
- Critical interplay with the 2023-2026 Capital Plan

The current 2019-2022 Capital Plan

2019-2022 Capital Plan: \$2.8 billion



2019-2022 Capital Plan delivery



- Most but not all of the 2019-22 recalibrated Capital Plan will be delivered by end-2022
- Reasons not everything will be delivered include:
 - Extraordinary events (pandemic, 2021 floods) impacted industry capacity, resource availability, supply chain delivery times, costs
 - Some projects have dependencies upon third party stakeholders, e.g., senior governments, First Nations, Vancouver School Board, BC Housing
- Important to note that the limiting factor for the City's capital delivery is not only funding

The 2023-2026 Draft Capital Plan

- The preliminary draft presented today...
 - Lives within the City's financial capacity
 - Invests in key priority areas such as climate, housing, affordability and equity
 - Focuses on renewal of existing assets and infrastructure, including a number of key large one-off projects
 - Includes projects/programs that support the population and employment growth scenario for the next decade
 - Balances needs across a wide array of City service areas

2.

The Capital Plan and city-building

[10 mins]



- The Vancouver Plan combined with area planning, provides the framework for long-term growth and change
- This growth requires both asset renewal and the delivery of new public benefits to meet the needs of new residents and businesses
- Public benefit strategies outline area needs and identify funding sources
- Capital projects and funding sources are confirmed through the Capital Planning Framework, and implemented through the four-year Capital Plan

Relationship between Capital Plan Framework and DCL Update



- Development contributions fund a significant share of the Capital Plan
- Development Cost Levies (DCLs), applied to all development, are a foundational development contribution funding tool
- The DCL Program updated in advance of the development of each four-year Capital Plan
 - Provides a revenue forecast and allocations among eligible Service Categories
 - Applied to support growth needs within the Capital Plan
 - Informed by a ten-year view of future capital needs

3.

2023-2026 Draft Capital Plan overview

[30 minutes]

Goals for Capital Planning

Renew aging infrastructure & amenities



Build new/expanded infrastructure & amenities to serve population & employment growth



Evolve infrastructure & amenities to address emerging needs, policies, and service delivery models/partnerships



Vancouver context: A maturing city...a growing city...



A maturing city → **aging infrastructure & facilities**



A growing city → **expansion of infrastructure & amenities**; unmet service expectation



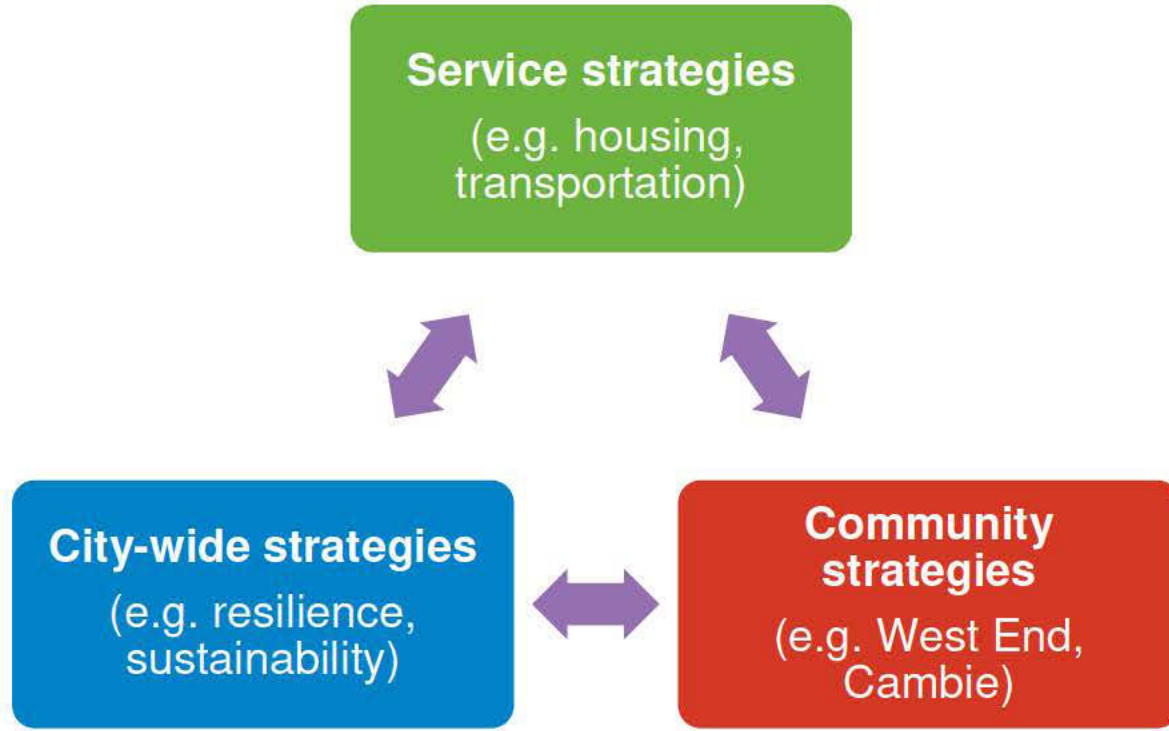
Fill the void → **growing pressure to deliver non-traditional municipal services** (e.g. housing, childcare)

Emerging needs (e.g. seismic, climate change)

Fiscal Limitation

Municipalities manage 60% of infrastructure in Canada, and get only 8-10 cents of each tax dollar

Inputs into Capital Planning process



Financial sustainability guiding principles

Fiscal Prudence

- Live within our means
- Consider long-term implications in all decisions
- Maintain a stable and predictable revenue stream
- Keep debt at a manageable level
- Build in flexibility and contingencies for emerging priorities and opportunities

Affordability & Cost Effectiveness

- Deliver services that are relevant and result in desired public outcomes
- Ensure value for money through productivity and innovation
- Keep property tax and fees affordable (in line with inflation)



Asset Management

- Maintain assets in an appropriate state of repair
- Optimize capital investments to meet public and economic needs while achieving value for the investment



Funding Sources **“Who pays”**

- City contributions
- Development contributions
- Partner contributions

Financing Methods **“When to pay”**

- Reserves
- Pay-as-you-go
- Debt

Range of capital funding sources

City (mostly for renewal)

- Property Tax
- Utility fees
- Other
 - Empty Homes Tax
 - Reserves

Development (new/expansion)

- Development Cost Levies
 - City-wide/Area specific
 - Utilities
- Other cash contributions
 - Community Amenity Cont.
 - Density Bonus Cont.
 - Water/sewer connection fees
- In-kind:
 - Land
 - Infrastructure & amenities

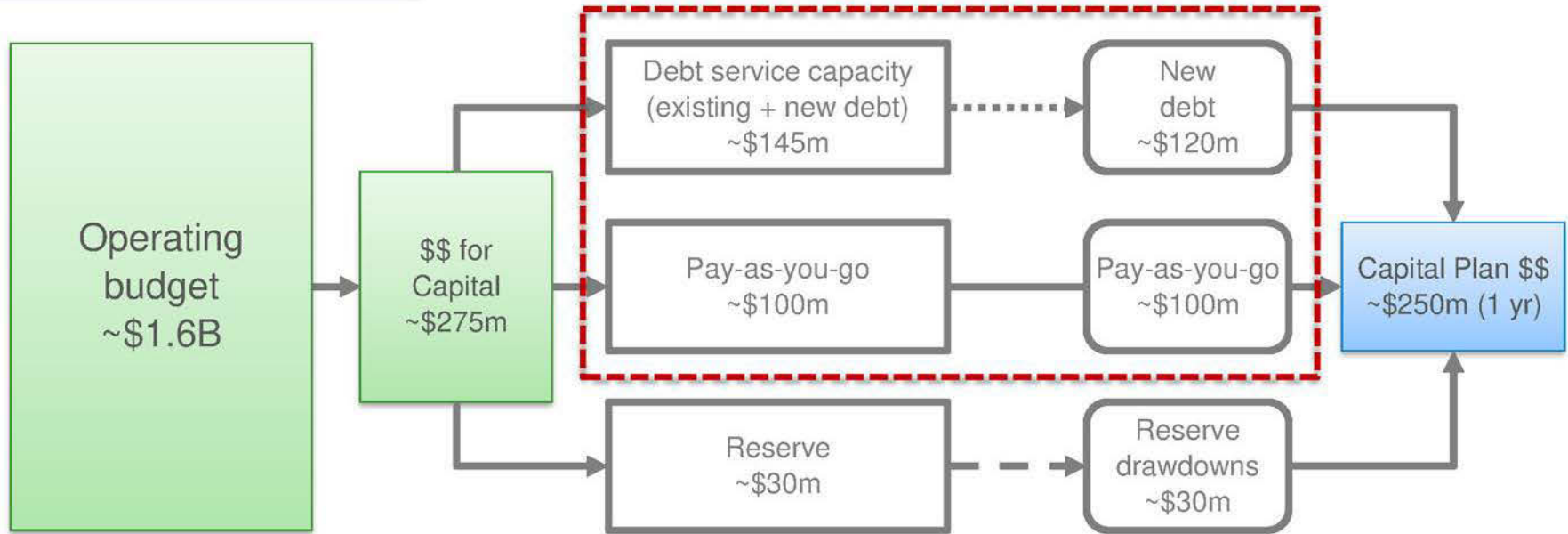
Partner (renewal + new)

- Regional:
 - TransLink
 - Metro Vancouver
- Senior gov't:
 - Provincial
 - Federal
- Community:
 - Non-profit sector
 - Donations

Council could increase City funding through higher taxes/fees; Development contribution is subject to development economic testing; Partner funding is mostly unpredictable

How is renewal funding for the Capital Plan determined?

illustrative example



Renewal funding is a function of i) allocation from the **Operating Budget** to support capital and ii) **maximize debt capacity** subject to credit rating agency metrics

Capital Assets, the City and the City's partners

Category	City Assets	Partner Assets:
Non-Market Housing	~1,000 units	~27,000 units
Childcare	~3,700 spaces	~9,300 spaces
Parks & Public Open Spaces	1,343 hectares 33 km of seawall	Public open spaces at schools, colleges, Granville Island, etc.
Arts & Culture and Community Facilities	~180 buildings with ~4.7M sq.ft.	Schools, neighbourhood houses, YWCA/YMCA, etc.
Public Safety & Civic Facilities	~100 buildings with ~2.0M sq.ft.	n.a.
Streets	2,165 km of sidewalks 333 km of bikeways 360 km of major roads 1,054 km of local roads	25 km of rapid transit (3 lines) 6 km of highways 5 bridges leading into city
Potable Water, Rainwater & Sanitary Water	1,487 km of water mains 2,130 km of storm/sewer mains ~100,000 connections	103 km of water mains 125 km of storm/sewer mains 2 water reservoirs
Est. replacement value:	\$33+ billion	~\$30 billion

Note: preliminary data from 2022

Today's infrastructure deficit ...



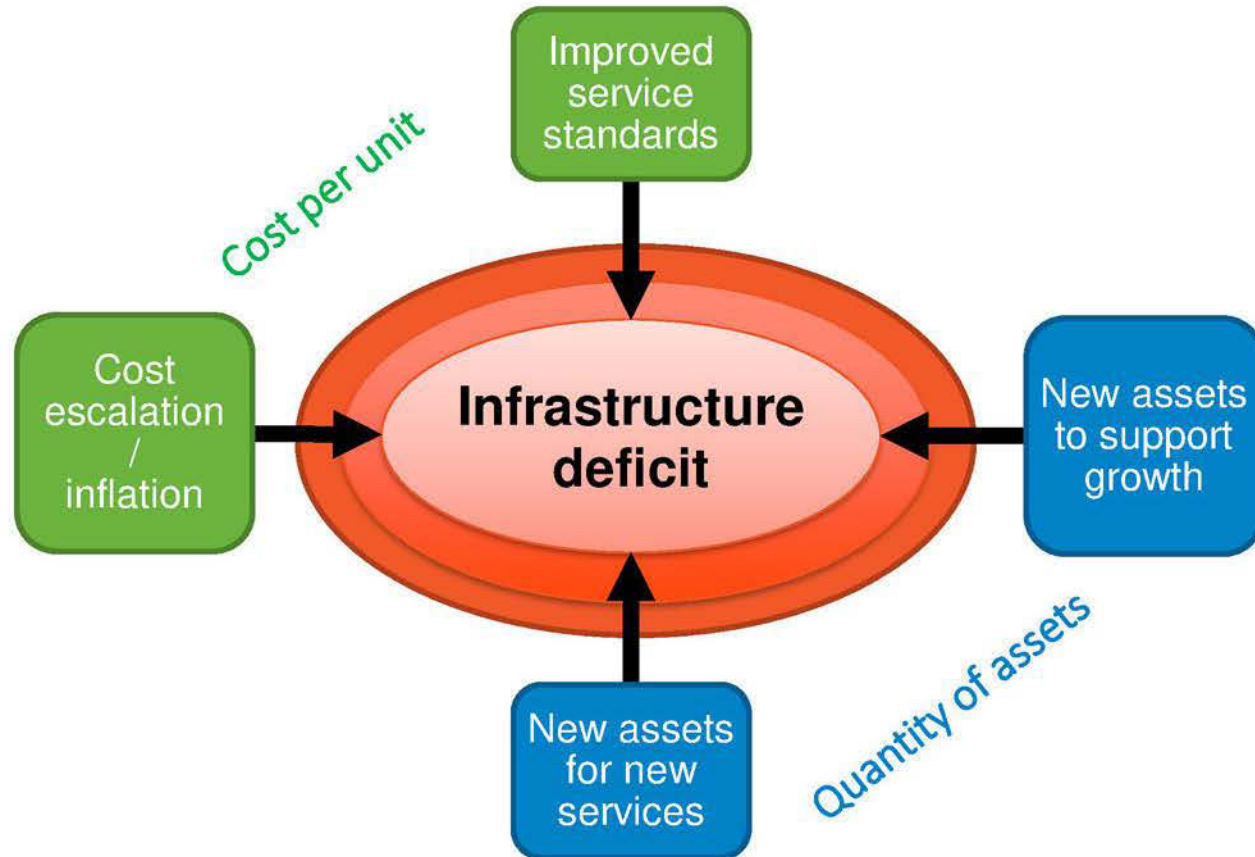
Renewal funding
needed (2022 est.):
~\$800M per year
(2.5% of replacement
value)



2019-2022 level of
renewal funding:
~\$300M per year

**Infrastructure deficit:
~\$500M per year**

Tomorrow's infrastructure deficit...



Addressing the infrastructure deficit

Facts:

1. The City's **infrastructure deficit** is significant and growing.
2. Infrastructure & amenities **need to be renewed**, unless they are decommissioned.
3. Most renewal funding comes from **taxes & fees**.

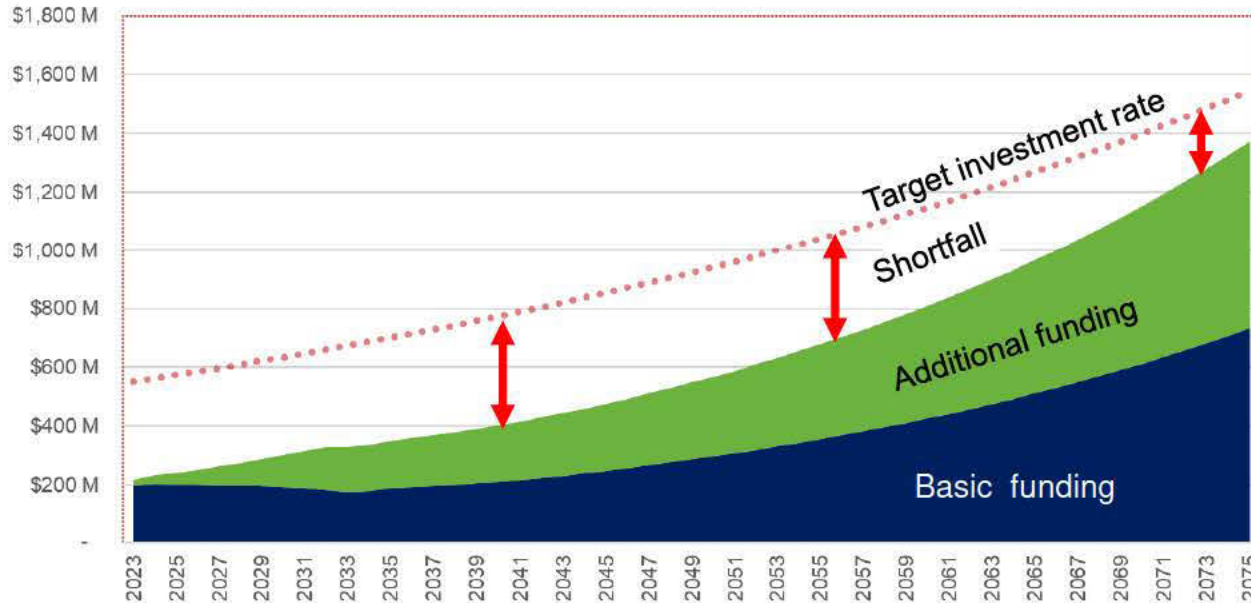
Strategy:

Implement a **multi-decade, intentional strategy** that...

- A. **increases funding capacity** for asset renewal;
- B. **advocates & pursues Fed./Prov. funding**;
- C. **limits growth of City's asset portfolio**; and
- D. **delivers infrastructure & amenities more efficiently** (e.g. reduce unit costs, strategic partnership).

Increasing City funding capacity to address infrastructure deficit

Additional **1% per year** since 2019 has been dedicated towards asset renewal



Maintaining, and potentially increasing, this funding is critical to addressing the City's growing infrastructure deficit over the next decades.

Development and partner contributions, looking forward

Development contributions:

- Anticipated to be equal or lower than last 5-10 year average

Partner contributions:

- Conservative funding assumptions given post-pandemic financial situation of funding partners (TransLink, Province and Federal gov't)

Funding is always limited, must rationalize, prioritize, balance competing needs

Asset renewal:

- Balance between **larger one-off projects** (e.g. Aquatic Centre) vs. **ongoing programs** (e.g. roof replacement)
- Balance between **community facilities** (e.g. library, recreation centre) vs. **civic facilities** (e.g. fire hall, service yard)

New / expanded amenities & infrastructure:

- supports **anticipated population & employment growth**
- **integrates with planned renewal projects**
- has a **high likelihood of leveraging partner funding**
- advances **climate, equity and/or reconciliation** goals

Preliminary Draft 2023-2026 Capital Plan, funding sources

Comparison of the current 2019-2022 Capital Plan to the Preliminary Draft 2023-2026 Capital Plan

<i>\$m</i>	2019-2022	2023-2026	Δ%
City contributions	1,049	1,723	64%
Devt. contributions	1,615	1,542	(5%)
Partner contributions	107	120	12%
Overall	2,771	3,385	22%

Preliminary Draft 2023-2026 Capital Plan, funding sources, continued

Comparison of the current 2019-2022 Capital Plan to the Preliminary Draft 2023-2026 Capital Plan

Who	When	\$m	2019-2022	2023-2026
City	Debt	General	300	410
		Sewers	159	200
		Neighbourhood energy utility	36	40
	Pay-go	General	206	400
		Water, sewer & solid waste utilities	202	384
	Reserves	Tax & fee funded reserves (e.g. Fleet)	146	150
		Empty Homes Tax	-	80
		Capital Financing Fund	-	59
Total City			1,049	1,723
Dev.			1,615	1,542
Partner			107	120
Overall			2,771	3,385

Preliminary Draft 2023-2026 Capital Plan, funding sources, continued

Comparison of the current 2019-2022 Capital Plan to the Preliminary Draft 2023-2026 Capital Plan

Who	\$m	2019-2022	2023-2026
City		1,049	1,723
Dev.	Development Cost Levies	725	553
	Community Amenity Contrib. & other	211	170
	Connections fees	110	131
	In-kind CACs	559	476
	In-kind other	10	212
Total Devt.		1,615	1,542
Partner	Metro / TransLink	73	93
	Federal / Provincial	17	9
	Other partners	17	19
Total Partner		107	120
Overall		2,771	3,385

Preliminary Draft 2023-26 Capital Plan, Service Categories

	City	Dev't.		Partner	Overall
<i>\$m</i>		Cash	In-kind		
Housing	84	186	335	12	617
Childcare	10	43	58	7	118
Parks & public open spaces	69	129	10	-	208
Arts & culture	91	21	32	1	145
Community facilities	191	74	87	6	358
Public safety	70	3	-	-	73
Civic facilities & equipment	57	-	-	-	57
Streets	191	90	-	82	363
Water, sewers & drainage	537	303	167	-	1,007
Waste collection, diversion & disposal	128	-	-	13	141
Renewable energy	68	5	-	-	73
Technology	110	-	-	-	110
Emerging priorities, cost escalation & deli	116	-	-	-	116
Overall	1,723	854	688	120	3,385
	51%	25%	20%	4%	

Large one-off projects

Construction included in the Draft 2023-2026 Capital Plan

- Vancouver Aquatic Centre renewal
- RayCam Centre renewal
- Granville Bridge rehab
- Cambie Bridge rehab/seismic
- Gastown/Water St. rehab
- Burrard Slopes Park expansion
- New SEFC East Park (phase 1)
- New track & field facility @ Killarney Park
- PNE Outdoor Amphitheatre renewal
- Animal Shelter renewal

Construction not included in the Draft 2023-2026 Capital Plan

- West End Community Hub
- Britannia Centre building 1
- Marpole Civic Centre / Library
- Fire Hall Arts Theatre renewal
- Stanley Park seawall reconstruction
- Fire hall renewal (location TBD)

Flexibility in 2023-2026 Draft Capital Plan allocations

A substantial share of the 2023-2026 Draft Capital Plan allocations are comprised of ongoing capital programs and continued funding of in-progress projects, per previous Council direction.

Not flexible

- In-kind land, infrastructure and amenities

Less flexible

- One-time projects that cannot be phased
- One-time projects with commitments from partners

More flexible

- One-time projects that can be phased
- Ongoing programs that are “scalable”

Sample trade-offs, what \$50 million can buy, for illustration ...



Non-market housing

- Delivery: 1 project
- 100 units
- Supply ↑ by ~ 0.5%

Funding

- City: \$10 million
- Partner: \$40 million



Full-day childcare

- Delivery: 4-5 projects
- 250 spaces
- Supply ↑ by ~ 5%

Funding

- City: ~ \$40 million
- Partner: ~ \$10 million



Park land

- Delivery: 20 parcels
- 1 hectare
- Supply ↑ by ~ 0.1%

Funding

- City: ~ \$50 million
- Partner: --



Transportation/public space

Delivery: 100 pedestrian crossings (supply ↑ by ~ 10%) + 10 km active transportation corridors (supply ↑ by ~ 3%) + 10 plazas (supply ↑ by ~ 40%)

Funding

- City: ~ \$40 million
- Partner: ~ \$10 million

4.
Questions to staff
[60 mins]

5.

Capital Plan service categories

[60 mins]



1. Service category overview
2. Service category achievements, over past four years
3. 2023-2026 Draft Capital Plan highlights for this Service Category
4. Relevant Board direction (Vancouver Board of Parks and Recreation, Vancouver Public Library, Vancouver Police Board)
5. Service Category's unfunded elements in the 2023-2026 Draft Capital Plan



#	REF	SERVICE CATEGORY	SUB-CATEGORY	PRESENTER OR DELEGATE	NO. MINS
1.	1. -	Parks & Open Spaces	-	GM, BP&R	5
2.	2. A	Community Facilities	Recreational facilities	GM, BP&R	8
3.	2. B	Community Facilities	Libraries	Chief Librarian	5
4.	2. C	Community Facilities	Social facilities/equity	GM, ACCS	5
5.	2. D	Community Facilities	Archives	Deputy City Manager (KL)	3
6.	3. A	Civic Facilities & Equipment	Service Yards	GM, REFM	3
7.	3. B	Civic Facilities & Equipment	Vehicles & Equipment	GM, Engineering Services	3
8.	4. -	Transportation & Street Use	-	GM, Engineering Services	8
9.	5. -	One Water	-	GM, Engineering Services	8
10.	6. -	Solid Waste	-	GM, Engineering Services	3
11.	7. -	Renewable Energy	-	GM, Engineering Services	3
12.	8. -	Technology	-	Chief Technology Officer	5
13.	9. -	Affordable Housing	-	GM, ACCS	8
14.	10. -	Childcare	-	GM, ACCS	5
15.	11. A	Arts & Culture	Public art and cultural facilities	GM, ACCS	5
16.	11. B	Arts & Culture	Heritage buildings	GM, PDS	3
17.	12. A	Public Safety	Fire services	Fire Chief	5
18.	12. B	Public Safety	Police services	Chief Constable	3
19.	12. C	Public Safety	Animal Services	GM, REFM	3

6.
Capital Plan service categories,
continued

[40 mins]

7.

Large one-off projects

[60 mins]

Large one-off projects, questions/discussion

Construction included in the Draft 2023-2026 Capital Plan

- Vancouver Aquatic Centre renewal
- RayCam Centre renewal
- Granville Bridge rehabilitation
- Cambie Bridge rehabilitation/seismic
- Gastown/Water Street rehabilitation
- Burrard Slopes Park expansion
- New SEFC East Park, Phase 1
- New track and field facility at Killarney Park
- PNE outdoor amphitheatre renewal
- Animal shelter renewal

Construction not included in the Draft 2023-2026 Capital Plan

- West End Community Hub
- Britannia Centre Building 1
- Marpole Civic Centre / Library
- Fire Hall Arts Theatre renewal
- Stanley Park seawall reconstruction
- Fire hall renewal, location tbd

7.
Council discussion
and questions to staff

[80 mins]

End



City Council 2023-2026 Capital Plan Workshop

March 31, 2022 and April 7, 2022

Parks & Open Spaces

Provide natural areas, open spaces and recreation amenities in parks to serve the broad and diverse needs of residents, workers and visitors, including building, operating, maintaining and renewing these assets. Sub-categories:

- Park land
- Seawall & waterfront
- Urban forest & natural areas
- Park amenities
- Park buildings, infrastructure & vehicles



Key achievements during past four years

- Capital plan executed through pandemic, encampments, unprecedented heat, smoke, flood, snow, rain and wind storm events.
- VanPlay Master Plan delivered, guides all projects
- Purchased more than 0.5ha in Burrard Slopes and Grandview Woodland for Park Expansion.
- Planted our 150,000th tree
- Tatlow Creek and Beaver Lake restoration projects
- 8 new and renewed parks (including new downtown park opening in April)
- 13 new + renewed playgrounds and fitness parks
- 70 acres of naturalized meadows
- Pop up park (Main + 7th) and plaza (Sunset Beach)
- Stanley Park bike lane





- Deliver new parks at Southeast False Creek (“East Park”) and Burrard Slopes
- Expand parks, including WC Shelly
- Renew high need parks e.g. Strathcona and John Hendry
- Improve and expand tree canopy in parks
- Convert existing park land to healthy habitat
- Deliver new track facility at Killarney
- Upgrade, renew and build new sport amenities, including fields, diamonds and courts
- Renew and electrify park vehicles and equipment
- Maintain and repair existing seawall and shoreline
- Plan and implement projects towards long-term coastal adaptation

Park Board adopted policy sets the direction for parks and recreation services and priorities. Over the past 4 years the Board has guided policy development to better understand the needs, opportunities, constraints and priorities for many parks and recreation services, to then direct capital investments for parks and recreation services:

- Urban Forest Strategy
- Biodiversity Strategy
- VanPlay guidance and asset targets
- Other Park Board Strategies:
 - People Parks and Dogs Strategy
 - On Water Strategy
 - Track and Field Strategy
 - Washroom Strategy
 - Local Food Action Plan
 - Pending Skate and Sport Field Strategies
- Board motions, including the Climate Emergency and Co-management with the Musqueam, Squamish, and Tsleil-Waututh Nations





1. Convert park water features to recirculating \$4M
Risk: bylaw requirement
2. Renew critical park buildings \$7M
Risk: life safety and lost revenue
3. Develop rainwater integration projects in collaboration with engineering \$5M
Risk: continued pressure on stormwater system and lost opportunities for habitat augmentation
4. New and renewed sport fields and diamonds \$7.7M
Risk: player injuries, and limits on teams and clubs due to lowest service capacity in region
5. Critical park infrastructure such as electrical, sanitary and water supply lines to buildings (e.g. Bloedel Conservatory) and features in parks \$20M
Risk: service disruption, cost escalation in emergency response

Community Facilities

(Recreational Facilities)



Provide the public with access to recreation facilities to keep up with population growth and changing needs. Recreation facilities include Community Centres, Senior Centres, Swimming Pools, Ice Rinks and Specialty Recreation Facilities (e.g. Curling Rinks). Categories:

- Projects (New and Renewed Community Centres)
- Programs (Renovations and Capital Maintenance)

Delivered key achievements towards phased projects at the following locations:

1. Marpole Community Centre & Pool
2. West Point Grey Community Centre
3. Britannia Community Centre
4. RayCam Community Centre
5. West End Community Centre and Ice Rink
6. NEFC Plaza of Nations Community Centre and Ice Rink



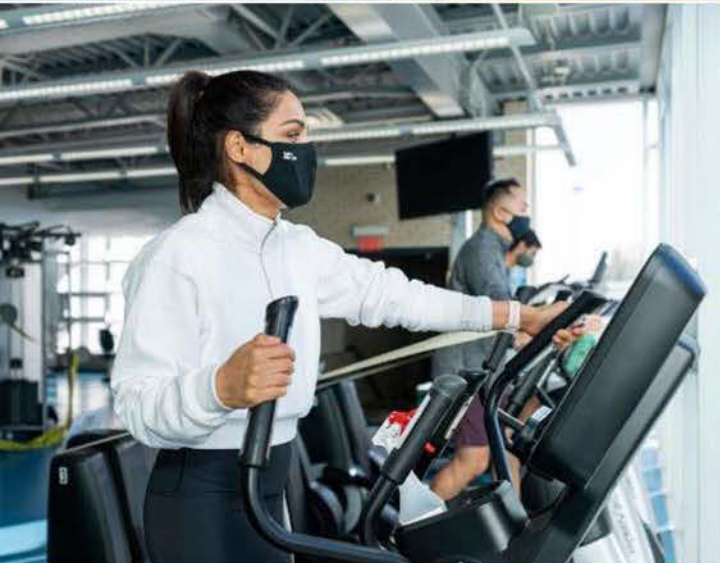


1. Renewal & expansion of RayCam Community Centre
2. Renewal & expansion Vancouver Aquatic Centre – planning, detailed design and tender
3. New East Fraser Lands Community Centre (in-kind)
4. New North East False Creek Community centre (in-kind)
5. New North East False Creek Ice rink (in-kind)

Park Board adopted policy sets the direction for parks and recreation services and priorities. Relevant policy to recreation facilities includes:

- VanPlay
- VanSplash
- Building a Path to Parks & Recreation for All (2STGD work)
- Community Centre strategy (pending)
- Board Motions: including Mount Pleasant Outdoor Pool





1. Construction of Mount Pleasant Outdoor Pool (\$20M)
Risk: Unmet service level goals
2. Community Centre Renovation and Maintenance investments to maintain and extend building life (\$7M)
Risk: Shortened building life, reduced use and efficiency of space
3. Accessibility and inclusion improvements (\$7M)
Risk: Exacerbate social isolation and mental health impacts for people with diverse needs
4. Planning, policy development for recreation facilities (\$2M)
Risk: Lack data driven approaches for allocating resources and responding to user needs
5. Initiate renewal planning at 2 community centres (\$4M)
Risk: Delay in implementing Community Centre Strategy and addressing community centre renewal needs

Community Facilities

(Libraries)

- Central Library and 20 library branches
- Free indoor space, resources and connectivity, social connectedness and belonging;
- Most built from 1945 to 1980; 8 renewed in last 30 years
- From 1,930 sq ft at Carnegie to 16,000 at Renfrew
- 77 visits per hour on average at branches
- Nearly 5,000 visits per day at Central Library
- Increased need during climate events



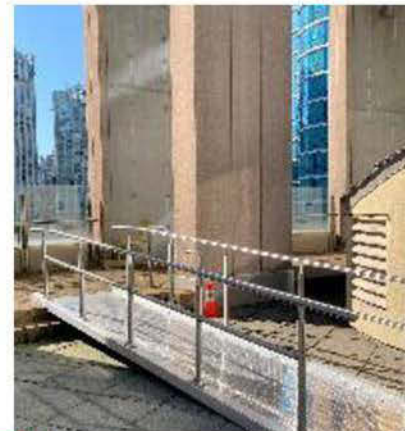
Capital Maintenance

- Accessibility improvements
- HVAC improvements for climate and COVID
- Branch renovations & temporary Oakridge
- Replaced 50 self-service check out machines

Major Projects in Planning & Design

Foundation/donor-funded

- Early learning centres at Renfrew and Britannia
- Children's Library feasibility



- Oakridge in 2024 (260,000+ visits/year)
- Marpole (3,600 sq ft, 134,000+ visits/year)
- Joe Fortes/West End (4,500 sq ft, 290,000+ visits/year)
- Preparing for further climate events
- Maintain existing library facilities (\$5.1M)



Provide welcoming and accessible physical and digital spaces that enable Vancouver residents to engage with information, ideas and each other

- Oakridge
- Marpole
- Joe Fortes
- Joyce-Collingwood
- \$200K annually for branch refurbishments
- Children's Library at Central and planning for Levels 2 & 3
- Reflect and celebrate Indigenous cultures and history



- \$22.3M unfunded
- \$0.1M for branch maintenance and renovation
- \$0.7M for planning for renewal
- \$3.7M for Oakridge branch opening: furniture, equipment and collections
- Marpole additional growth of 5,600 sq ft to meet Board goal of 17,000 sq ft
- Joe Fortes additional growth of 5,500 sq ft to meet Board goal of 20,000 sq ft
- Maintain existing facilities (\$4.5M). Risks: Reduced accessibility, increased roof and pipe leaks, temporary loss of HVAC/space

Community Facilities

(Social Facilities)

A. City Owned Facilities

- 3 Social Operations Community Centres - Carnegie, Evelyn Saller and Gathering Place
- Co-located facilities at Community Centres: Youth centres, Seniors centres (NPO run)
- Mountain View Cemetery

B. NPO Owned and/or Operated Facilities

- ~400 Social-serving NPOs
- Indigenous Healing & Wellness, Women's Centres, Cultural Community Centers, OPS, Non-Profit Facilities
- NPO Small, Medium, Critical Assist Grants

C. Neighbourhood Houses

- 6 on City Owned Land; 5 non-City-owned

D. Food Infrastructure & Facilities

- Urban farms, food & medicine gardens: ~90 COV sites
- Integrated kitchens, food programming spaces

E. DTES Capital Grants (PDS)

- Implement DTES LAP
- Special Enterprise Program, Community Economic Development, Upgrades to Neighbourhood



Collaboration, co-
location, shared
spaces

OPPORTUNITIES FOR CO-LOCATION

Park Board facilities, social
housing, public libraries, cultural
facilities

Projects Delivered Since 2018

* Not yet complete



Evelyn Saller



312 Main



Killarney Seniors' Centre



Collingwood NH Annex



City Contributions



*UNYA(\$500K + \$2M
site acquisition)



*Aboriginal Land Trust
Healing Centre (\$2M)



*Qmunity (\$8M
CAC + \$1.5M)



*DTES Indigenous Women's
Healing Centre (\$700K)



*1st/Clark Social Enterprise
(\$2M)

... *plus* *CED Hub (501 Powell); 7 S2T Actions, 10+ Accessibility Renovations for NPO Facilities

Draft 2023-2026 Capital Plan highlights

Social Infrastructure (ACCS)

\$22.9M <i>In-Kind CACs</i>	Cambie Corridor: Youth Centre at 5812 Cambie (\$8M) Cambie Corridor: NPO Admin Hub 5740 Cambie (\$12.4M)
	West End CC: Social/cultural space design (\$2.5M)
\$5M City	Grants for Neighbourhood Houses – Renewal/Expansion <i>Planned: Cedar Cottage NH, DTES NH</i>
\$1.1M City	Social Capital Grant Program
\$4.3M City	Capital Maintenance of City Social Operations (\$2.9M) <i>Including remaining Carnegie façade, HVAC re-roofing, base building systems at end of life</i> Renovations (\$1.4M) <i>Including some accessibility upgrades for City-owned spaces (e.g., Carnegie & Gathering Place)</i>
\$4M City	Planning & Research (Staff/consultants, Research and Feasibility studies)

Total City Contribution: \$14.4M; Total In-kind Contribution: \$22.9 M

Downtown Eastside LAP Implementation (PDS)

\$4.5M City	DTES Capital Grants Program <ul style="list-style-type: none"> • Community Economic Development \$500K • Community Asset Improvements \$500K • Upgrades to the neighbourhood \$500K • Strategic Grants: \$2.5M
-------------	--

Total City Contribution: \$4.5M; Total In-kind Contribution: \$0

Cost	Unfunded Elements	New/ Existing	Implications
\$13M	Community Economic Development Hub & Small Vending Sites	<ul style="list-style-type: none"> New: 501/525 Powell CED Hub – Women’s income generating space (\$9M) New: 1-2 Street vending solutions as per Vending Study (\$4M) <i>e.g., site activations, equipment, setup costs, etc.</i> 	<ul style="list-style-type: none"> Ongoing and increased illegal street vending Delayed delivery of social housing
\$8.7M	Equity & Indigenous Projects	<ul style="list-style-type: none"> Expand/New: 1-2 NPO Indigenous Projects <i>e.g., VAFCS; MVAEC member facilities; Indigenous Food Hub</i> Kitchen Renovation for Indigenous Service Hub (City-Owned 390 Main) (\$1M) New: 1 Cultural Community Project <i>e.g. Hogan’s Alley, Punjabi Market, Filipino community, Paueru Gai</i> Expand/New: 1 new Gender Equity Project <i>e.g. DEWC Expansion, GED Women’s Sobering Centre</i> 	<ul style="list-style-type: none"> Inability to Respond to Cultural Redress, UN Safe Cities, MMIWG and Reconciliation Loss of opportunity to leverage Senior Gov’t Funds Loss of opportunity to co-locate space in rezoning projects
\$2M	Urban Agriculture and Food Security	<ul style="list-style-type: none"> New: South Vancouver NH Food Centre New: Greenhouse Infrastructure Retain: Maintain and expand growing sites 	<ul style="list-style-type: none"> Decreased food security Asset Loss
\$1.2M	Social Operations Community Centre Renos	<ul style="list-style-type: none"> Renew: Complete remaining washroom accessibility upgrades at Carnegie Center (3 levels) 	<ul style="list-style-type: none"> Washrooms in these facilities have barriers for people with disabilities
\$7M	Mountain View Cemetery	<ul style="list-style-type: none"> Interment Capacity \$7M (Revenue) 	<ul style="list-style-type: none"> Revenue will become insufficient to maintain operations
\$1.8M	Capital Maintenance	<ul style="list-style-type: none"> Social Operations (City-owned) – Carnegie, Gathering Place, Evelyne Saller City-owned Social Facilities (City-Owned, NPO operated) 	<ul style="list-style-type: none"> Reduced accessibility, increased roof and pipe leaks, temporary loss of space, loss of hvac, envelope issues (Carnegie sandstone)

Community Facilities

(Archives)

- The City of Vancouver Archives' current home in Vanier Park reached capacity in 2008 and a satellite site in East Vancouver was occupied in 2017
- The satellite site serves as temporary solution for the Archives' storage needs, until a permanent solution can be realized
- Projects in the archives category for 2023-2026 address capacity and maintenance needs at the Archives' satellite site and plan for the Archives' overall facility renewal

- Completion of the Archives' "Pre-move Project", a project to prepare the Archives to move out of Vanier Park (including full inventory of holdings and implementation of barcode/location tracking system)
- Urgent upgrades at satellite site to protect Archives' holdings for 5-10 year period – currently underway (climate control improvements and quarantine freezer)

- \$1M – Replacement of shelving at satellite site with deeper shelving, which increases capacity by 1/3 to accommodate the Archives until 2030 while awaiting long-term solution/permanent home. This includes an addition of 150 square meters of shelving space
- \$1.4M – Long-term planning for renewal/replacement of Vanier Park/satellite site to prepare for possible design and construction later in 2027-2030 capital cycle
- \$1.6M – Maintenance and operation of satellite site solution for 2023-2026. Insured value of the holdings at the satellite is \$5.2 million

Civic Facilities & Equipment

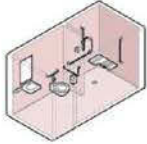
(Service Yards)



- Service Yards serve as a base of operations for City staff and fleet providing essential services to the community.
- Service yards are key for Civic resiliency and have an important role in disaster response.
- 3 City departments operate service yards:
 - Engineering Yards: Manitoba, National, Inverness, Kent
 - Parks: Stanley Park, Sunset, Jericho, VanDusen, Queen Elizabeth, and Evans
 - REFM: Evans
- Many service yards are concentrated in industrial zoning in low laying coastal areas that have the potential for floods and liquefaction.



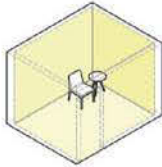
Universal Toilet Room
① A private room with a toilet and sink, or a shared room with private toilet stalls and communal sinks.



Universal Shower Room
② A private room complete with a shower.



Universal Change Room
③ A private room or cubicle complete with a bench.



Service Yard Equitable Facilities Review

- Commitment to employment equity, address workplace diversity and inclusion:
 - Reviewed existing washroom, change room, and locker room facilities.
 - Renovation projects prioritized, and ready for implementation.

Engineering Service Yards

- Manitoba Master Plan will be completed Q2 2022:
 - Plan to meet current & future needs and will demonstrate leadership in sustainability and resiliency.
- Upgrades at Manitoba Yard:
 - Relay Building CNG Retrofits – Completed fall 2020
 - Fuel Station Upgrade and Tank Replacement– in construction – scheduled completion Q4 2022
 - HydroVac Garage – Design completed, tender on hold pending funding

Park Service Yards

- Finalized Sunset Yard Master Plan:
 - Plan to reorganize yard, replace obsolete facilities from 1940's, increase efficiency, and modernize.
- Initiated work at Sunset Yard on first 2 phases of 5-phase plan:
 - Sunset Caretaker House: Renovations scheduled for completion Q4 2022.
 - Sunset Operations Building: New staff facilities and support space scheduled for completion in Q4 2023.





- Renovate 8-10 staff washroom and change room facilities as prioritized across all yards to address issues with equity and accessibility per the **Service Yard Equitable Facilities Review**.
- **Sunset Yard:** Complete the detailed design phase and review options for further phased delivery at the Mid-term Update in 2024.





- **Sunset Yard Renewal:** Phase 3 & 4
 - Phase 3 – Construction of new Greenhouse Facility
 - Phase 4 – Demolition of existing Greenhouses & Sheds, Site work for fleet parking. Upgrades to energy plant.
 - Risk of not proceeding: Potential safety issues or disruption to services.
- **Manitoba Yard Renewal:** Detailed Design & Construction of Phase 1
 - Potential service disruption with ageing buildings and site infrastructure.
- **Manitoba Yard Safety and Business Continuity Renovations:** Sewers Trailer, Salt Shed
 - Immediate needs must be addressed for safety and business continuity
- **Queen Elizabeth Park:** Temporary Facilities to replace fire damaged service yard building
 - Risk of not proceeding: Service disruption to park maintenance.
- **Evans Yard:** Expansion of materials storage and fleet parking

Civic Facilities & Equipment

(Vehicles & Equipment)

Fleet and Manufacturing Services

- Provides full lifecycle management of the City-wide fleet including:
 - Vehicle / equipment asset procurement
 - Maintenance and repairs
 - Fueling contract / infrastructure



Vehicles & Equipment Assets (\$ 276M)

740	Engineering Services
300	Board of Parks & Recreation
440	Vancouver Police Department
128	Vancouver Fire Rescue Services

Fleet Emission Reduction

- Increased **Zero Emission Vehicle (ZEV)** fleet
- Piloted BC's **first medium-duty electric refuse vehicles**
- Secured **\$1.5M in senior government funding** for EV projects
- **Reduced fleet GHG emissions by 52%** below 2007 baseline
- Transitioned to renewable fuels (50% of all fuel & 80% of diesel)

Fleet Asset Replacement & Upgrades

- Increased vehicle & equipment renewal to **reduce operational costs** and fleet downtime
- **Improved overall fleet condition** from 55% in good/fair condition in 2018 to 61% in good/fair condition in 2022

2019 – 2022 Infrastructure Investments

496 fleet assets replaced
115 new zero emission vehicles



▲ Tandem dump truck renewal program (replaced all poor condition trucks)



▲ BC's first medium duty electric refuse vehicle

Fleet Renewal

- Continue to **strengthen asset replacement**, focusing on fleet health, resilience and innovation:
 - Replace 650-700 assets
 - Improve fleet condition from 61% good/fair to 65-70% good/fair
 - Right-size and optimize fleet assets

Fleet Electrification

- Integrate the **Climate Emergency Response** within the fleet asset management program
 - Replace 200-250 gas/diesel assets with electric (~25% of fleet renewal)
 - Focus on market-ready technology (sedans, cargo vans, pickups)
 - Pilot medium/heavy duty trucks by leveraging senior gov't funding

Fleet Management & Growth

- Reduce the reliance on expensive leased units by **buying out existing leases**
- Grow certain segments of the City fleet (VFRS, Street Cleaning, and Parks) to meet forecasted changes in operational requirements

Limitations on Fleet Electrification

- **Limited availability** of suitable medium/heavy duty electric assets, due to:
 - Developing market and technology
 - Significant cost premium (150% - 250%)
 - Technological limitations for City applications

Risks with Fleet Growth

- Execution of overall City capital plan may result in **additional needs not yet defined**
- Need for additional vehicles/equipment & associated staffing unclear until specific operations-delivered work plans are developed

Streets

Building a Resilient Network

- Manage **streets, structures and electrical assets** to ensure public safety, economic connectivity, accessibility, state of good repair, and resiliency

Improving Mobility

- Improve **walking, cycling and transit networks** to enable and encourage sustainable modes of travel, eliminate fatalities and serious injuries, and create a safe, accessible transportation system

Supporting Public Life

- Create **public gathering spaces and amenities** including plazas, horticulture, curbside uses to support **public needs** and advance **business, climate emergency** and **equity goals**, as well as cultural redress



Transportation & Street Assets (\$ 11B)

1,414 km	roadways (MRN, arterials & local)
2,165 km	sidewalks
333 km	bikeways
45	bridges & structures
32,000	street light poles
509	traffic signals
393	pedestrian/bike signals
10,000	parking meters
30	parklets
20	plazas
25 ha	street horticulture

Responding to the COVID-19 Pandemic

- Created **16 ongoing temporary plazas; 13 ongoing temporary parklets**
- Piloted **Sidewalk and transit improvements** on Robson St
- Implemented **Beach Ave. bike lane**
- Delivered over **40 slow streets improvements**
- Expanded transit network with **19 km of pilot bus lanes**

Building a Resilient Network

- Completed Phase 1 of **Granville Bridge Steel Coating Rehabilitation**
- Eliminated backlog of **600 pedestrian curb ramps**

2019 – 2022 Infrastructure Investments

45	traffic signal upgrades
46 km	roadway rehabilitation
600	new curb ramps
7 km	new & improved sidewalks



▲ Cambie & 18th pop-up plaza



▲ Granville Bridge Rehabilitation (Phase 1)

Improving Mobility

- Delivered over **20km of AAA upgrades** and **new sidewalks** (e.g. Richards, Haro, Ontario, Smithe, 10th Avenue, CVG, etc.)
- Planned and designed the **Granville Bridge Connector**
- **Improved 22 km of bus network** (90% stops accessible)

Supporting Public Life

- Implemented **3 permanent plazas** (800 Robson, Blood Alley Square, Bute-Robson)
- Upgraded **4 plazas and 5 parklets**
- Continued **parking meter replacement**

2019 – 2022 Infrastructure Investments

13 km	new bikeways
36 km	new bus lanes
12 new	ped/bike signals
3	permanent plazas
13	parklets



▲ 800 Robson Plaza

Renewal of major infrastructure, while advancing climate emergency response, equity, safety and accessibility

- Granville & Cambie Bridges structural rehab & seismic upgrades
- Gastown streets rehabilitation and improvements
- Transportation safety and accessibility – signals, crossings, curb ramps
- Supportive infrastructure for Broadway Subway
- Transit priority projects – leveraging TransLink funding
- Walking, cycling and traffic calming improvements – primarily temp materials (Kent Ave AT improvements, Portside Greenway, 2 traffic calming plans)
- Minor upgrades to Public Gathering / Plazas – primarily temp materials



▲ Granville bridge structural & seismic rehabilitation



▲ Bus priority area improvements

Programs & Initiatives**Draft Plan
Funding****Unfunded
Element****Gastown & Water Street Rehabilitation**

- Urgent rehabilitation works, design and engagement for future phases (\$13M required in future capital plan).

\$7M

\$13M

Active Transportation & Neighbourhood Traffic Management

- Council targets for climate, safety and accessibility

\$40M

\$20M (city)\$20M (partner)**Public Gathering Spaces / Plazas**

- Temporary plazas / parklets into permanent spaces, respond to BIAs and communities; advance cultural redress place-making

\$8M

\$7M

One Water

Potable Water

- **Deliver clean, safe drinking water, equitably** to all residents and businesses
- Provide **water supply for fire suppression**
- Increase system **resilience** and **plan for climate change and emergencies**

Urban Watersheds, Sewers and Drainage

- **Provide sanitary, drainage, rainwater management, flood protection** to protect public health, property and the environment
- **Develop integrated watershed plans** for each of the city's 19 urban watersheds to **mitigate flood risks, restore ecosystem functions, and improve resilience.**
- **Adapt to climate change risks and impacts, while addressing chronic pollution** in receiving waters



Sewer and Drainage Assets (\$ 7.6B)

2,139 km	sewer mains
93,000	service connections
41,799	catch basins
24	sanitary pump stations
315	green rainwater infrastructure (GRI)

Potable Water Assets (\$ 3.1B)

1,475 km	water mains
100,000	service connections
23,000	water meters
6,600	fire hydrants
28	PRV stations
48	drinking fountains
12 km	dedicated fire protection system

Increased Asset Renewal Rates

- **Water main renewal:** 0.6% to 0.9% (future target 1.2%)
- **Sewer main renewal:** 0.3% to 0.5% (future target 1.5%)
- **Sanitary pump station renewal**

Supported Growth

- New and upgraded **water and sewer mains** and **connections**
- New **green rainwater infrastructure assets** to capture and treat water closer to where it falls, and defer costly pipe upgrades
- Completed **Integrated Water Management Plans** for Cambie Corridor and Broadway Plan Area

2019 – 2022 Infrastructure Investments

Systems Renewed

36 km	water mains
24 km	sewer mains
1	sewer pump station
2	water PRV stations

New & Upgraded Assets

4 km	water mains
540 m	sewer main separation
3,200	water & sewer connections



▲ Glen & W 7th Sewer Pump Station

Improved Resiliency & Climate Change Adaptation

- Added to **Hardened Grid** network of seismically resilient water mains
- Improved **Access to Water** in the public realm
- **Increased coverage of residential water meters to 14%**
- **Reduced water consumption by 6%** overall per capita since 2018
- Increased **coastal flood protection through coastal flood structures and 3 tidal gate upgrades**

Advanced Urban Watershed Management

- Completed **Rain City Strategy** and **Healthy Waters Plan** (Phase 1)
- **Finalized 1.2 km of coastal flood protection**
- **Constructed Blue-Green System pilots**
(Richards St. and Prince Edward St in Sunset Park)
- **Increased City right of way managed by green rainwater infrastructure by 54%** (from 12.5 hectares to 19.3 hectares)
- Established sewer and drainage **system modelling and monitoring program** to inform investment planning

2019 – 2022 Infrastructure Investments

New & Upgraded Assets

6 km	added to water hardened grid
9	drinking fountains
4,200	residential meters
1.2 km	coastal flood protection
109	GRI installations
6.8 ha	GRI managed street area



▲ Richards Street blue green system

Continue to Increase System Renewal Rates toward Sustainable Asset Management Targets

- Increase **water renewal rate** from 0.9% to 1.1% (future target 1.2%)
- Increase **sewer renewal rate** from 0.6% to 0.8% to progressively address rate of aging and deterioration (future target 1.5%)
- Complete **renewal/refurbishment of 4 pump stations**; initiate renewal/refurbishment of 3 pump stations

Support Growth and Development

- New and upgraded sewer mains, pump station, green rainwater infrastructure assets, water mains, service connections and meters

2023 – 2026 Proposed Investments

Systems Renewals

55 - 65 km	water mains
38 km	sewer mains
4	sewer pump stations

New & Upgraded Assets

2.5 km	water mains
~3 km	sewer mains separation
1	sewer pump station
4,000	water & sewer connections



▲ Downtown water transmission main renewal

Improve Resiliency & Climate Change Adaptation

- Add to the **seismically resilient Water Hardened Grid**
- Increase **Access To Water** in the public realm
- Double coverage of **residential water meters** to 30%
- Reduce **per capita water consumption** by 8% from 2019 levels

Advance Urban Watershed Management

- Continue to **invest in green rainwater infrastructure assets** to mitigate flood risks, capture stormwater pollutants, reduce CSO events, and improve ecosystem functions
- Address **Combined Sewer Overflows** (CSOs) and urban run-off pollution through **targeted CSO reduction investments** (Crowe St, Charleson Catchment, Renfrew Creek and SW Marine) and **installation of monitors at all 20 CSO outfalls**
- Implement key **Blue-Green System projects** including St. George Rainway, and the Alberta Street and Columbia Park project

2023 – 2026 Proposed Investments

New & Upgraded Assets

5 km	added to water hardened grid
20	drinking water fountains
15,000	residential meters
23 ha	GRI managed street area



▲ New accessible drinking fountain with bottle filler

Programs & Initiatives**Unfunded
Element****Green Rainwater Infrastructure (GRI) Implementation**

\$28M

- 16 ha of additional street area managed by GRI are required to meet Rain City Strategy targets (in addition to 23 ha already planned in the draft capital plan)

Asset Management & Inventory Betterment

\$4.5M

- Complete field surveys and improve spatial/GIS data
- Complete Lowland Ditch Asset Management Plan

Long term investment strategy implications

- **Water and sewer renewal rates continue to scale up:** deterioration will continue to outpace renewal as we increase renewal rates over the next several Capital Plans
- **Universal Water Metering:** Metro Vancouver target to reach universal metering by 2030 not achievable. Strategy will be developed to scale up over the next several Capital Plans.
- **Development of city-wide sewer and drainage model** extends beyond this plan

Solid Waste

Sanitation

- **Street Cleaning**, litter collection, abandoned **waste collection**
- Collection of **compostable organics** and garbage

Disposal

- Operating and managing:
 - The **Vancouver Landfill** and Zero Waste Centre
 - Vancouver South **Transfer Station** and **Zero Waste Centre**
 - Landfill gas recovery system

Diversion

- Implementing the City's **Zero Waste 2040** plan and Single Use Item Strategy
- Maximizing **waste reduction** and diversion from disposal
- Community involvement and volunteer support
- Solid waste bylaw enforcement



Solid Waste Assets (\$ 227M)

46 ha	landfill (active)
127 ha	landfill (closed)
438	landfill gas collection wells
24	buildings & facilities
890	litter & recycling stations
200,000	garbage & green cans

Sanitation

- Invested in equipment & systems to **improve public realm cleaning**
 - 105,100 km of street/bike lanes swept
 - 671,100 abandoned items collected

Disposal

- Continued **landfill closure** work, expanded gas collection and invested in systems to **convert landfill gas to natural gas**
- Secured **\$5.7M senior government** funding to support gas system upgrades

Diversion

- Completed **Zero Waste 2040 Strategic Plan** & Single Use Item Reduction plan
- Food waste diversion – circular economy study with VEC, Love Food Hate Waste campaign

2019 – 2022 Infrastructure Investments

15 ha	landfill capped & closed
85	new gas wells
5.8 km	gas collection pipes
347	garbage & recycling stations



▲ Landfill gas collection well (monitoring)

Sanitation

- Deploy 350 new high volume **recycling and litter containers**
- Continue **electrification of sanitation vehicles**
- Update routing, dispatch and cart Management

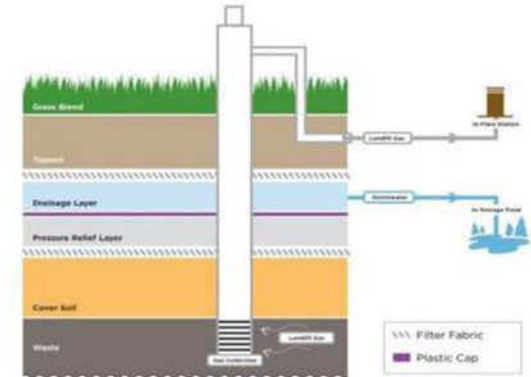
Disposal

- Complete design for 27 ha and implement 14 ha of **landfill closure**
- Expand **landfill gas collection** and monitoring of closed landfill cells
- Complete **improvements to Transfer Station** (new roof, air handling, floor repairs)

Diversion

- Zero waste initiatives are primarily **unfunded** (see following slide)

Closure and Gas collection



Programs & Initiatives	Unfunded Element
New North Zero Waste Facility <ul style="list-style-type: none">• Initiate planning & scoping for a new facility to increase access and reduce travel time for residents to drop off material for recycling	\$1 M
Diversion of Challenging Materials <ul style="list-style-type: none">• Assess and pilot options for food waste and plastics (key initiative to reduce waste)	\$1.5 M
Recovery of 'Niche' Materials <ul style="list-style-type: none">• Investigate diversion options for difficult materials & product (e.g. furniture, wood, car seats)	\$2.5 M
Zero Waste Demonstration Centre <ul style="list-style-type: none">• Continue development of demonstration centre to allow exploration of new technologies to reduce disposal, recover materials, and build resiliency	\$1.5 M
Soil Processing & Aggregate Recovery <ul style="list-style-type: none">• Invest in equipment to process ~200,000 tonnes of soil and aggregate from City projects to recover useable construction material and reduce disposal	\$3 M

Renewable Energy

Neighbourhood Energy Utility (NEU)

- Provides **low carbon heat and hot water** to community buildings in the False Creek and Mount Pleasant areas of the City.
- This utility helps achieve key actions under the Climate Emergency Action Plan (CEAP), the Greenest City 2020 Action Plan and the Renewable City Action Plan



Neighbourhood Energy Assets (\$ 80M)

- 2 energy centres
- 12 km distribution pipes
- 44 energy transfer stations

Key achievements during past four years

- Completed the **Mount Pleasant Expansion project**, installing 1.9km of new distribution piping into the Mount Pleasant area
- Connected **11 new buildings (112,000m²) to the NEU system**
- Completed the **5MW Mount Pleasant Peaking Plant**, the utility's first satellite energy generation plant
- Completed the **installation of 6.6MW of low carbon energy** via the sewage heat recovery expansion at the False Creek Energy Centre

2019 – 2022 Infrastructure Investments

Systems Renewed

- 27 system controls
- 2 heat exchangers

New & Upgraded Assets

- 2.5 km distribution pipes
- 11 transfers stations
- 1 peaking plan



▲ Boiler Room at False Creek Energy Centre

Continue Expansion as per 2018 NEU Expansion Plan & CEAP

- **Expand distribution** system by up to 1.7km
- **Connect up to 20 buildings** (200,000 m²) to the NEU system
- **Expand to Northeast False Creek**, subject to expansion investment analysis
- Commission **6.6 MW of low carbon energy** via the sewage heat recovery expansion at the False Creek Energy Centre
- Install **6 MW of peaking capacity** via the Thornton St. Temporary Boiler Plant
- Progress **planning and design of the next low carbon energy generation project**

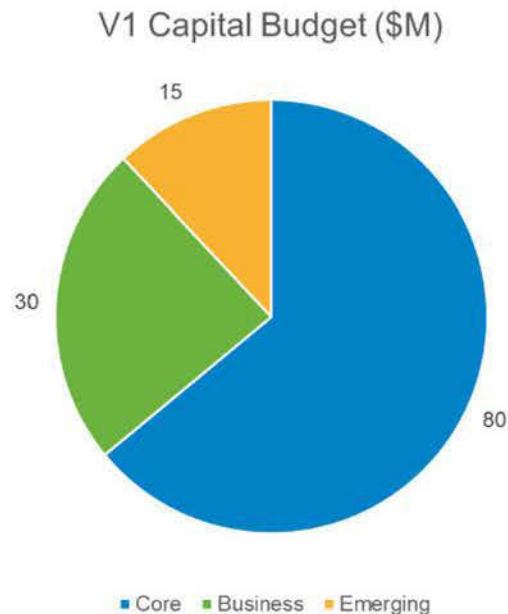
NEU Commitment Under CEAP

- **Finalize decarbonisation Roadmap** and bring to Council (cost of implementation of the roadmap not included in this capital plan)



Technology

- **Core Technology - \$80M (64%)**
 - Infrastructure - XXL
 - Client Services – XL
 - Platforms & Applications - L
 - Enterprise Data - M
 - VPD - L
 - VPL - M
- **Business Technology - \$30M (24%)**
 - SAP - XXL
 - Business Initiatives – XL
 - Asset Management - XL
 - Permits & Licensing - XL
 - Data enablement - L
 - Digital Workplace - M
 - VPD & VPL - L
- **Emerging priorities - \$15M (12%)**



Core Technology

Platform upgrades:

Amanda, ESRI, Hansen, Lagan, SharePoint, Service Now, Open Data, Success Factors, Tempest

Infrastructure enhancements

Hybrid Data Center program
Firewall upgrades, network equipment replacements, cybersecurity tooling
Microsoft Enterprise Agreement

VPD

Digital Evidence Management

VPL

Network and infrastructure upgrades

Business Technology

Business Priority Initiatives:

Electronic plans
Empty Homes Tax
Grants management
Talk Vancouver & Shape Your City
REFM Incident Management
Fleet software replacement
VCT Point of Sale
VFRS gear tracker
VPB Concession stand POS
Council & VPB AV upgrades

VPD

Online crime reporting improvements
eTicketing

Core Technology

Platform upgrades:

Integration platform upgrade, SAP upgrades and enhancement, PowerBI implementation, Topobase replacement

Infrastructure enhancements

Data centre co-location, server and data growth
Network and Digital Infrastructure upgrades and enhancement.
Laptop/desktop replacements

VPD

Data Centre, server and network enhancements

VPL

Server room rebuild, cybersecurity enhancements

Business Technology

Business Priority Initiatives:

SAP business initiatives
Asset Management
Permits & Licensing enhancements
Data enablement
Digital Workplace & Collaboration
VPD & VPL initiatives

Potential unfunded elements

- Significant shift from desktops to laptops during pandemic. Budget implications on hardware replacement program.

Current unknowns

- Capital investment \$ required to enhance CoV fibre network – dependent on pace of IoT program with Dept. of Engineering

Affordable Housing

Non-Market Housing Development & Operations	Portfolio Deployment	<ul style="list-style-type: none"> CHIP program Deployment of turn-key housing from private developers
	Development	<ul style="list-style-type: none"> 30+ projects (upcoming & under development) Key programs include: RHI (223 units), PMSHI (350+ units), TMH (750+ units), CLT 7 sites (~1,000 units)
	Housing operations	<ul style="list-style-type: none"> 12 buildings, 1,000+ homes to be maintained
	Lease management & partnerships	<ul style="list-style-type: none"> 200+ leases with non-profits and co-ops Building owner maintenance responsibilities as per leases
Housing and Homelessness Services	Supportive Housing & SROs	<ul style="list-style-type: none"> Supportive housing strategy and implementation SRO strategy development and implementation
	Emergency shelters	<ul style="list-style-type: none"> Implementation of emergency shelters (lease, acquisition, tenant improvements)

Acquisitions/new deployments

- Deployed City land with NP delivery partners: 866 units completed, 860 units under construction, 737 under contract/development*
- Deployed 3 air-space parcels (223 units) secured from private developers for social housing and another completing this year (138 units)*
- Delivery of remaining 7 TMH buildings (306 units) & first relocation
- Acquisition of 3 assets for supportive housing through RHI (203 units)*
- Acquisition/dedication of new land for PMSHI (target 300 units; across 5 sites)*
- Completed land assemblies (e.g. Vienna House)*
- Regent & Balmoral *
- Acquisition and opening Ross House (24 units)

Capital Construction

- Roddan Lodge co-location (213 units)*
- 480 Broughton co-location (60 units)*
- Firehall #5 co-location (31 units)

Capital Grants

- \$29M in CHIP grants over 768 units (9 projects) and capital towards enhancing affordability of City land projects *
- \$8M of RHI funding towards delivery of non-profit project*

Asset Preservation/Replacement

- \$1.3M in SRO grants and (add'l \$700k grant recommendation coming to Council in Q2 2022)*
- Initiated SRO strategy with senior government*
- Studied replacement/redevelopment of city-owned Central & Alexander buildings*

Draft 2023-2026 Capital Plan highlights

Land acquisition	\$122M Total	Land acquisitions for social/supportive housing as City land is deployed (\$90M)	New land that will support delivery of ~600 homes once developed
		Acquisition of land to preserve TMH stock for the long term (\$20M)	~4 buildings, ~200 homes
	\$122M City	In-kind land contributions from private developers and PEF	New land that will support delivery of ~700 homes once developed
		Capital for environmental remediation and demolition of existing buildings to enable redevelopment (\$12M)	~ 2 sites, ~120 existing units
Low-income housing	\$51M \$39M City \$12M Partner	Replacement of temp shelters with permanent (\$12M)	40% of 1,500 units in 10yr CSO
		Acquisition of priority sites per anticipated tri-level SRO strategy (\$12M + 12M Partner)	~ 2 sites, ~150 units
		Capital to relocate 220 Terminal building to another temp location (\$3M)	40 units
		Capital to replace City-owned buildings beyond their useful life (\$10M)	~1 building, ~65 existing units
		SRO Upgrades Grants program (\$2M)	
Non-market housing	\$400M \$100M City \$300M In-kind	Predevelopment funding to generate 'shovel ready' sites on City land for senior government funding (mostly recoverable) (\$35M)	~30 new and ongoing projects
		Increase CHIP program to enhance affordability of non-profit projects (\$65M)	~900 units @ \$75,000/unit
		In-kind contributions to secure units from private developers (\$300M in-kind)	~725 units
Purpose Built Rental	\$35M all In-kind	In-kind contributions for DCL waivers for new purpose built rental (\$35M IN-KIND)	~3,500 units
Other Programs	\$8.8m	Capital maintenance / renovations to keep buildings functional and efficient and address deferred maintenance (\$4.3M)	~\$81 PUPM across ~1,100 units
	all City	Planning, studies and capitalized staff costs (\$4.5M)	Various initiatives and staffing

TOTAL \$709.8M
\$335M In-kind; \$269.8M City

Cost	Unfunded Elements	New/ Existing	Implications
\$3.7M	Capital maintenance program to meet existing and deferred maintenance needs of City-owned buildings	Existing	<ul style="list-style-type: none"> Increased fire/flood or other life-safety event Unplanned tenant displacement due to building closure
\$25M	New land for supportive housing to meet 10yr outlook trend based on HV	New	<ul style="list-style-type: none"> Do not meet 10yr social housing outlook estimates

Cost	Emerging Directions (TBC)	New/ Existing	Notes
\$30M	Marpole Civic Centre: co-located housing	New	<ul style="list-style-type: none"> Related to renewal of Marpole Branch Library Insufficient cash CACs to advance non-housing components of project
\$2M	Tripartite SRO Investment Strategy	Existing	<ul style="list-style-type: none"> City contribution to tri-level strategy planning and implementation administration

Childcare

Civic Projects

- Delivering childcare on City land and buildings, Community Centres, elementary and secondary schools

In-Kind Development

- Facilitating childcare facilities delivered as part of a public benefit package in new development projects, through CAC and DCL contributions

Public/Non-profit Partner Projects: Capital Grants

- Supporting childcare projects on public- and non-profit owned sites
- Supporting Indigenous-led projects, including culturally-safe school age care off school grounds, and other childcare projects help to close identified equity gaps
- Small Capital Assist Grants to support partner-led renovations, including emergency renovations to retain licensing approval

Childcare Planning and Delivery team

- Childcare development-focused staff positions funded from capital budget

PARTNERSHIPS

- *Province of BC*: 2019 MOU/funding partnership to support creation of new spaces
- Co-location with Public and Non-Profit Partners:
 - *VSB*: seismic/childcare program halted; new models explored: outdoor-based childcare pilot, Seamless Day pilot
 - *Community Centre Associations*: Conversion of underused spaces and existing preschool rooms to address community need for full-day childcare
 - *Colocation with housing projects and healthcare worksite*: VNHS, BC Housing, PHSA
- **Indigenous Childcare Planning**
 - Initiated new Indigenous childcare liaison role MVAEC
 - Supported development of mixed-use projects: BCACS and VAFC

POLICIES AND STRATEGIES

- *Council Motions*: Building a Family Friendly Vancouver; Childcare That Works
- *Draft Childcare Strategy*: May 17, 2022
- *COVID response*: COV Childcare team and Westcoast Child Care Resource Centre worked on province-wide model to support childcare sector during the pandemic
- Alignment with new and emerging COV policies and tools

PROGRAMS

- *Design of new capital grants program*: for non-profit and community owned childcare facilities

SPACE CREATION 2019-2022	Spaces approved				Spaces that became operational
	0-4 years	School Age Care	Renewal	Total # approved	0-4 and School Age Care
Expanded the supply of non profit and publicly-operated childcare spaces by >1,000 spaces	775	352	62	1068	531

Projects/ Programs	Area	Spaces		Budget: \$128.5M		
		0-4 yrs	School Age	Municipal	Development	Partner
Civic: Parks and Schools co-location <ul style="list-style-type: none"> West End Civic Centre renewal Ray Cam Community Centre renewal Olympic Village school 	Central South East	240 (40 replacement)	90 (85 replacement)	\$8.9M	\$42.5M	\$9.9M
Civic: VAHA co-location projects <ul style="list-style-type: none"> Urban Native Youth Association (UNYA) 	Midtown East	37			\$6.5M	\$1.5M
Conversion of preschool to full day programs	City-wide	64			\$0.6M	
Developer In-kind projects (7)	Central Cambie Corridor	314			\$44.0M	
Capital grant program: non-City owned (0-4)	Citywide	100			\$5.0M	
Capital grant program: Indigenous-led, culturally-safe school age care (off school)	Citywide	N/A	60		\$2.1M	\$0.9M
Small capital grant program: for non-City owned facilities (emergencies)	Citywide	N/A	N/A	\$0.4M		
City-owned: Capital Maintenance and Renovations	Citywide	N/A		\$1.3M		
Planning and Studies: Incl staff team	Citywide + staffing	N/A	N/A		\$3.5M	
TOTALS		515	150	\$10.6M	\$104.2M	\$13.8M

1. Civic Projects and Programs Not Yet Funded

Project or Program	Area	# Spaces	Cost
Cedar Cottage NH* <i>senior govt funding</i>	Midtown East	37	\$8.0M
VAHA co-location downtown	Central	74	\$16M
Capital Maintenance Program gap	Citywide	n/a	\$4M
Kensington Community Centre Expansion	Midtown East	74	\$16M
Grandview Terrace <i>renewal and expansion (VSB school site)</i>	Midtown East	56 (incl 25 renewal)	\$12M
Decommissioned School Site*	East Side	74	\$16M
New VSB 0-4 projects	Citywide	TBD	TBD

2. Programs Gaps

- a) **Underfunded Capital Maintenance Program**
An additional \$1.2M would be required to keep buildings functional and address deferred maintenance.
- b) **Capital grants to support 200 new Partner-owned spaces**
Potential lost opportunity to incentivize and encourage secured, non-profit and publicly-owned childcare at an economical per-space cost
- c) **School Age Care Program**
VSB assumed to take on full responsibility, but no confirmation of VSB role

Considerations:

- Due to development, committed projects are generally in areas with high development potential (Central and Corridor)
- No funding available to fund opportunities in areas with equity gaps, service gaps, and lower development potential
- Need for swing sites during redevelopment

Arts & Culture

(Public Art & Cultural Facilities)



Policy Priorities

- Self-determined Musqueam, Squamish, Tsleil-Waututh, Urban Indigenous Spaces & Public Art
- Cultural Heritage, Equity, Redress & Accessibility
- Renewal & Enhancement of City owned spaces
- Increased partnerships, Community Ownership, Community led Cultural Land Trust

CAPITAL PROGRAM AREAS

Public Art Program

- Civic & Private Programs, grants, maintenance & conservation

Chinatown Transformation

- Center intangible cultural heritage in City planning, policy
- Grants & support for cultural & heritage spaces, equity/redress initiatives, community ownership of cultural heritage assets

Cultural Spaces

- Center arts & culture in City planning, policy, reduce barriers
- Grants to plan/buy/build/renovate City & non-City cultural spaces
- > 40 City spaces NPO run > 800K sf & Artist Studio Awards
- Develop new spaces through development

Civic Theatres

- Orpheum, Queen Elizabeth Theatre and Plaza, Annex & Playhouse Theatre

Key achievements during last four years

\$.62M Chinatown Cultural Partnerships

- ~120K Great Beginnings + planned 500K grants 2022
- 28.5M new Provincial Museum funding

85 commissions \$13.2 M Public Art (12.2M inkind)

- Civic Program (\$4.2M)
 - 6 artist-initiated, 360K grants, ~65 2D
 - 3 major restorations; ~25 repairs (\$1M)
- Private Sector Program (\$8.9M) inkind
 - 1 Public lands, 15 private

4 new cultural spaces: shovel in ground \$37M (inkind)

- 200 seat performance space Oakridge CC & artist studios-underway
- 30 units artist housing & 4K sf production space (Main & 3rd) - complete
- 20,000 sf Cultural hub downtown – finishing underway
- 6,000 st Music Production and Rehearsal Space (Fir & 7th)*

> 160 Cultural Spaces Infrastructure Grants (\$6M to plan, fix, expand, buy cultural space)

- Serves over >\$1M sf cultural space
- Leveraged \$30M in cultural space projects
- > 50% of them City controlled NPO run (e.g. VIFF Theatre)

\$6.3M in Civic Theatres Upgrades (800K / 4M VCT Reserve / 1.5M Fed Grant)

- Safety, technology, elevator replacement, POS



Photos: Lyse Lemieux, *Personnages*, 2021 (photo Rachel Topham)

Draft 2023-2026 Capital Plan highlights

Amount	Projects
\$21.7M In-kind	2 new in-kind cultural spaces <ul style="list-style-type: none"> 9 artist live/work studios @ 5910-5998 Cambie 14,000 sq ft Cultural hub at Burrard & Davie
\$1M City	Chinatown Cultural Partnerships Funding to support revitalization of Chinatown cultural spaces & heritage
\$5M City	Cultural Infrastructure Grants ~130 small to medium grants to plan, research, fix, upgrade, build, buy cultural space – for both City owned & non-City owned spaces
\$16M City	Cultural Spaces Capital Maintenance <ul style="list-style-type: none"> >1M sf, 48 buildings ~50% poor/very poor condition
\$1.4M (\$0.4M City; \$1M Partner)	Joy Kogawa House Renewal <ul style="list-style-type: none"> Partner contribution \$1M
\$1M City	Civic Theater maintenance, renovations, and upgrades (plus an additional \$3 million from facility fees)
\$0.4M City	Planning and implementation: feasibility studies
\$17M (\$1M City; \$16M Dev)	Public Art <ul style="list-style-type: none"> \$5M Civic Program: 16-22 new, 40-50 temporary/2D (Split developer cash and in-kind) \$10M Private Developer in-kind projects \$2M Maintenance: 5-10 major, 25-30 minor
Total City Contribution: <u>\$24.8M</u>; Total Dev Contribution: <u>\$37.7M</u>; Total Partner Contribution: <u>\$1M</u>	

Unfunded elements

Amount	Unfunded Elements	New/ Existing	Implications
\$4M	Chinatown Grants & Partnerships Support to Chinatown cultural spaces & heritage	Renew/ new	Can not meet UNESCO or Chinatown commitments, further deterioration of heritage assets
\$11.3M	Firehall Theatre Renew/Expand 12K sf 40 yrs old DTES theatre; very poor condition for >decade; incl new shared elevator, accessible entrance w/adjacent Police Museum	Renew/ Expand	Space no longer meets basic actor requirements, no code compliant accessibility, basic systems at end of life, impact on basic operations
\$4M	Vancouver Cultural Spaces Fund & Cultural Land Trust 2019 Council approved \$10M will leverage > \$50M for large partnership projects & new cultural land trust. Increase partner funding & sector capacity	New/ renew	Lost opportunity to lower City responsibility & costs & support sector capacity, delayed contribution less effective as prices rise, lose strong community momentum
\$1M	Cultural Infrastructure Grants Restore grants to previous Capital Plan level (Grants < 250K to over 30 City owned spaces & non city spaces)	New/ renew	~ 30 less grants supporting \$5M in improvements (including ~\$2.5M reduction on work in City owned cultural spaces (\$2M other investment))
\$5M	Playhouse Reno/Upgrades Address demand for a more accessible, functional, financially viable venue; accessibility upgrades, building systems end-of-life	Reno/ upgrades	Inability to implement accessibility improvements Impact ability to optimize access & utilization by clients & public
\$1M	Vanier Park Planning Joint planning project with Park Board and MST	New/ renew	Fast tracked w/ Senakw, Referrals to MST, buildings in very poor /end of life condition
\$12.2M	Cultural Facilities Capital Maintenance	Existing	Reduced accessibility, pipe and roof leaks, temporary loss of HVAC/space and power

Arts & Culture

(Heritage Buildings)

Three programs to support heritage conservation citywide:

1. **Heritage Incentive Program** (CAC funded) – for seismic upgrade and heritage conservation of unreinforced masonry structures (primarily large buildings)
- **Heritage Façade Rehabilitation Program** – for stabilization and heritage conservation of heritage facades (primarily mid-rise, mix-use buildings)
 - **VHF Heritage House Conservation Grant** – for dissemination through a number of smaller grants to owners of heritage houses

1. **Heritage Incentive Program** (2019-2022)

- 6 projects: 4 projects delivered (\$9.8 M) plus 2 anticipated in 2022 (\$4M)

2. **Heritage Façade Rehabilitation Program** (2019-2022)

- 3 projects: 2 delivered (\$150,000) plus 1 anticipated in 2022 (\$50,000)

3. **VHF – Heritage House Conservation Grant** (2019-2022)

- 148 projects: 113 projects delivered plus 35 anticipated in 2022

1. **Heritage Incentive Program (2023-2026)**

- 6-8 projects, by extending the existing HIP Program into next term

2. **Heritage Façade Rehabilitation Program (2023-2026)**

- 8 projects, by improving and extending the existing HBRP Program

3. **VHF – Heritage House Conservation Grant (2019-2022)**

- 150 projects, by extending the existing HHCG program

Note: in spring/summer 2023 staff will approach Council to ask for a new 4-year extension to all three programs

Public Safety

(Fire)

- VFRS provides public safety response to the City of Vancouver for fire suppression, medical, rescue, hazardous materials etc
- 19 Fire halls strategically located across the City for time/distance travel (+1 UBC)
- Fire halls are critical to effective response during emergencies and disasters
- Training facilities, mechanical and service facilities,
- Capital equipment, fleet

- Firehall 5: Co-Location with YWCA. LEED Gold
- Firehall 17: Passive House, Net Zero Energy, Zero GHG, LEED Gold



- West End fire hall (FH #6) – design of renewal & expansion
- Capital maintenance program
- Renovations to keep facilities functional & efficient
- Renewal of VFRS vehicle & equipment
- Electrification of VFRS vehicle & equipment
- New VFRS vehicle & equipment

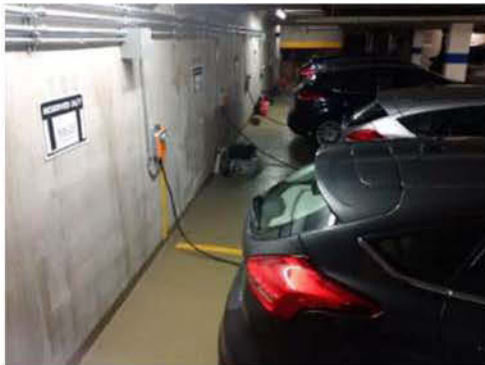
- New Cambie Corridor fire hall - land acquisition \$20 M
 - planning & design \$4.0 M
- Fire Halls - renewal & expansion
 - Kensington fire hall (FH#20) - \$30 M
 - Downtown South fire hall (FH#8) - \$30 M
- Fire truck maintenance facility relocation
- Fire training center expansion

- Implications: service level, ERF, safety, resiliency, WorkSafe, capacity, growth

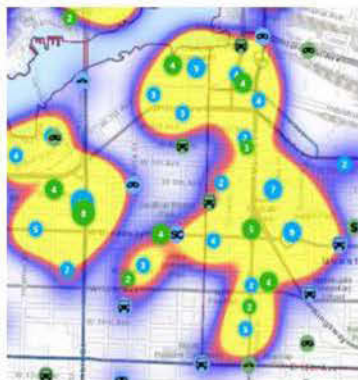
Public Safety

(Police)

- VPD Technology Plan
 - DEMs and Smartphones
 - Enhanced on-line reporting
- Fleet refresh, evolution and greening
- REFM facility upgrades
 - Women's locker room expansion
 - 2120 Cambie public lobby expansion



- Consolidated, post-disaster facility – Phase 1
- Digital transformation/modernization
- Continued fleet evolution, greening, and electrification



- Consolidated, post-disaster headquarters
 - Resilience
 - Current Cambie headquarters is leased
 - Southeast False Creek development



- Capital maintenance of existing facilities (\$5.9M)
 - Reduced accessibility
 - Increased roof and pipe leaks
 - Temporary loss of heating, ventilation, and air conditioning



Public Safety

(Animal Services)

Vancouver Animal Services (VAS) carries out the provisions of the Vancouver Charter and Animal Control By-law and operates the Vancouver animal shelter facility focused on providing:

- public safety from dangerous dogs and other animals, licencing and other related regulations
- animal care and adoption services
- support to encourage responsible pet ownership, and return lost animals to their rightful owners
- public communication and outreach to attain a good quality of life for public and pets



01 ANIMAL STRESS AND WELLNESS



02 ADOPTIONS + EDUCATION



03 DISEASE CONTROL



04 STAFF OPERATIONS + SAFETY



05 SUSTAINABILITY + GROWTH

Key achievements during past four years

- Site exploration on City-owned properties suitable for redevelopment and potential co-location opportunities with other City services
 - Council approved the acquisition of 1245 Glen Drive, located adjacent to the City's animal shelter as a strategic future development site and for possible land assembly for a future shelter rebuild
- Functional Programming Study for shelter redevelopment including test-fit options for:
 - a stand-alone facility on existing City site(s) and
 - explore a potential co-location with BC SPCA (MOU with CoV and BCSPCA completed to explore options)
- Maintained existing end-of-life animal shelter with minimal investment



Explore Potential Co-location of VAS with BC SPCA animal campus redevelopment planned on their existing site with the following goals:

- More efficient partnership for delivery of capital project and ongoing operations
- Higher quality animal care service, better equipped facility with easier and timely access to on-site veterinarian services and hospital
- Streamlined and improved customer service by providing a “One Stop Shop” type service to the public supported by good public transit access and adequate parking
- Improved public safety through public education and community outreach opportunities
- Improved City staff and volunteer commuting options



1280 RAYMUR AVE
existing CoV facility
ANIMAL CONTROL BYLAW
SERVICES + ADOPTIONS
(DOGS AND SMALL
ANIMALS EXCLUDING
CATS)

1205 EAST 7TH AVE
existing BCSPCA facility
ANIMAL SHELTER +
ADOPTIONS + HOSPITAL
(ALL ANIMALS)

NEW STANDALONE COV FACILITY
STATUS QUO



CO-LOCATED OPTION
SHARED FACILITIES BETWEEN COV + BCSPCA



End